

## Management of genital warts

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**Objective:** To describe presentation, diagnostic and treatment tools for genital warts @ Urology and Gynecology Department CMC/SMBBMU, Larkana.

**Methodology:** This retrospective study included 50 patients with genital warts who were treated January 2016 to December 2019. Age, gender, presenting complaints, history of smoking, oral contraceptive and history of unprotected sexual contacts along with relevant clinical genital examination were obtained from records. Full blood count, VDRL, Elisa for HIV, PCR and pap test, colposcopy and biopsy data were recorded. Data were analyzed using SPSS 20.

**Results:** The mean age of patients was  $29.4 \pm 7.83$  in women and  $36.1 \pm 8.87$  years in males. Male and female ratio was 1:0.66. Clinical examination was the most frequent diagnostic method used. Surgical excision was done in 40 patients while 10 were referred to dermatology department due to multiple and small warts.

**Conclusion:** The genital warts need proper treatment by the dermatologists, urological surgeons and uro-gynecologists. (Rawal Med J 202;46:1001-1003).

**Keywords:** Genital warts, surgical management, frequent diagnostic method.

### INTRODUCTION

Genital warts are fleshy growth having mostly gray in color, located in genital region of either gender. They are also called as Condyloma acuminata or venereal warts due to its association with venereal diseases or sexually transmitted infection (STI).<sup>1</sup> Virus that causes genital wart is Human papilloma virus; there are more than 100 types of HPV out of which more than 40 are associated genital wart. Among 40 there are 2 specific types of HPV called HPV-6 and 11 types which have strong association. These warts are highly infectious and transmittable to sexual partner.<sup>2</sup> Human papilloma virus not only causes wart but having also malignant potential in both genders, in women it is potential factor for cervical tumors and in male penile and urethral tumors. Other than HPV causative factors for genital warts are patients on immunosuppression, chronic smoker, oral contraceptive medicines for long time, unsafe or unprotected sexual partners.<sup>3</sup> Diagnosis depends on history of contact, clinical examination and VDRL, Elisa for HIV, pap test, colposcopy, PCR and sometimes biopsy. Management depends on proper counselling of patient to avoid unprotected and unsafe sexual contacts, quit smoking and stopping oral

contraceptive. Treatment can be medical or surgical and nowadays HPV vaccine is also available.<sup>1,4</sup> We describe here our experience with genital warts at our institution.

### METHODOLOGY

This is retrospective study of 50 patients with raised lesion at genital areas, were diagnosed and treated as genital warts at Urology and Gynecology wards from January 2016 to December 2019. Age, gender, presenting complaints, history of smoking, oral contraceptive and history of unprotected sexual contacts along with relevant clinical genital examination were obtained from record of patients. Full blood count, VDRL, Elisa for HIV, PCR and sometimes pap test, colposcopy, biopsy results were recorded.

**Statistical Analysis:** Data were analyzed using SPSS 20.

### RESULTS

Mean age of patients was  $29.4 \pm 7.83$  years in women and in male  $36.1 \pm 8.87$  years. Male and female ratio was 1:0.66. Clinical examination was the most frequent diagnostic method used and 40 patients were treated by surgical excision while 10 referred

to dermatology department for further treatment due to multiple and small warts.

**Table. Risk factor for genital warts (n=50).**

Risk Factors	Number (%)
Unprotected sexual intercourse	41 (82)
Smokers	25 (50)
Oral Contraceptive	02 (4)

Among these 50 patients 41 (82%) have history of unprotected sexual contact, 25 (50%) patients have history of smoking and 2 (4%) female patients have history of long term oral contraceptive consumption (Table).

## DISCUSSION

In our study, 80% patients presented with large warts due to late presentation, mostly feeling shy during examination so needs surgical excision which is comparable to Yanofsky et al.<sup>2</sup> Vaccine called Gardasil (HPV4) was approved by FDA and leads to development of antibodies against HPV resulting more than 90% reduction in genital premalignant.<sup>5</sup>

Podophyllotoxin, extract of the podophyllum plant as gel can be applied up to 1 month. It causes necrotic shrinking and wart fall off.<sup>6</sup> Imiquimod (imidazoquinolinamine) cream is applied topically by patient. It causes inflammatory response that leads secretion of various types of cytokines like interferon alpha, tumor necrotic factor alpha and interleukin-6 that leads to clearance of wart.<sup>7</sup>

Sinecatechins, a plant extract and FDA approved since 2006 is obtained from leaves of green tea. The cream is applied by patient three times a day for the period of four months.<sup>8</sup> Trichloroacetic acid (TCA) is used in concentration of 90% and destroys warts leading to necrosis and eventually its sloughing off.<sup>6,7</sup>

Cryosurgery, electro surgery, laser and surgical excision have been used. Cryosurgery is indicated for multiple warts in either gander and has success rate of >85% for 1<sup>st</sup> three cycles. Electro surgery leads to coagulation necrosis which is then removed with curettage. Like cryosurgery, it is also used for small multiple warts at genital area in both gander.<sup>8</sup>

Laser uses Carbon dioxide as infrared energy source, which causes vaporization of warts. Due to its higher thermal effect it's also cause cauterization

of blood vessels, hence considered as bloodless procedure with no scarring. But considered less effective than other treatment options.<sup>9</sup>

Surgical excision is recommended for larger warts having success rate of >75%.<sup>10</sup> In our study, large warts were excised surgically while small and multiple warts referred to dermatological department, as done by others.<sup>10</sup>

## CONCLUSION

The genital warts are highly contagious and need proper treatment by the dermatologist, urological surgeons and uro-gynecologists

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